

Governor's Water Augmentation,
Innovation and Conservation
Council Meeting
March 19, 2021



Agenda

- I. Welcome and Introductions
- II. Committee Updates
 - a. Post-2025 AMAs Committee
 - b. Long-Term Water Augmentation Committee
 - c. Non-AMA Groundwater Committee
 - d. Desalination Committee
- III. Council Annual Report – *Carol Ward, ADWR*
- IV. 5th Management Plans Update – *Natalie Mast, ADWR*
- V. Closing Remarks
- VI. Next Meeting
 - June 17, 2021, 10:00 a.m. - 12:00 p.m.
- VII. Adjournment



Webinar Logistics

- Please state your name when speaking.
- Mute yourself when not speaking.
- Indicate you wish to speak by typing your name in the chat box, and you will be invited to unmute and speak.
- Please message “Everyone” in the chat.
- The meeting and chat will be recorded.

Technical issues? Send a **direct message to ADWR-Host** in the chat, call the ADWR Help Desk at **602-771-8444** or email **tickets@azwater.gov**.



Welcome and Introductions



5th Management Plans Update



Natalie Mast
AMA Director, Management Plans



Estimated 5MP Timeline

new.azwater.gov/5MP

2020

MPWG

Program Analysis

Program Development

2021

Drafting

Document Structure & Content

Implementation & Strategy

2022

Promulgation

Present to GUACs and stakeholders

Conservation Programs become effective 1/1/2025

Estimated 5MP Timeline

new.azwater.gov/5MP

2020: Development

- Work Group, Subgroups, & Stakeholder Outreach
- Data Analysis
- Develop [Concepts](#) to Increase Conservation
 - Update Existing Programs
 - Design New Programs

2021: Drafting

- Build out [Concepts](#) developed in previous phase
 - Regulatory Language
 - Feedback from GUACs/AMAs re: Customization & Implementation
- Draft Narrative & Background
- Develop Data Tools

2022: Adoption

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 - Noticing of Conservation Requirements



MANAGEMENT PLANS WORK GROUP

A.R.S. § 45-563 (A)

“The director shall develop a management plan for each initial active management area for each of five management periods... and shall adopt the plans only after public hearings... The plans shall include a continuing mandatory conservation program... designed to achieve reductions in withdrawals of groundwater.”



MANAGEMENT PLANS WORK GROUP

5TH MANAGEMENT PLANS CONCEPTS

As ADWR and the 5th Management Plans Work Group proceeds in the development of concepts and stakeholder comments related to 5MP conservation programs will be provided, links are provided, to provide additional context for the concept. Any questions or comments should be sent to managementplans@azwater.gov.

AGRICULTURAL SUBGROUP

INDUSTRIAL SUBGROUP

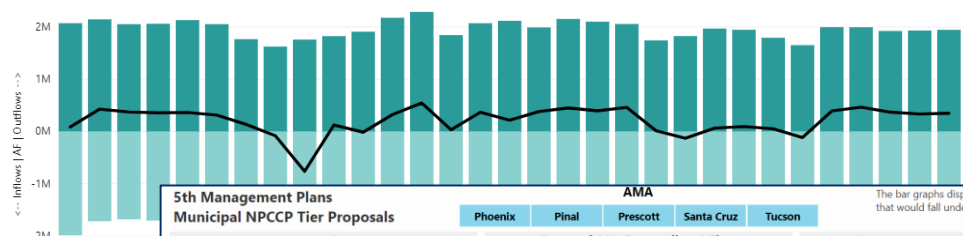
TURF BREAKOUT GROUP

MUNICIPAL SUBGROUP

5MP Concepts Webpage

ANNUAL INFLOWS & OUTFLOWS

● Inflow ● Outflow ● Overdraft



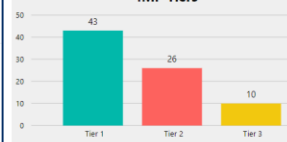
OVERDRAFT DASHBOARD

Last Updated: 07/01/2020

5th Management Plans Municipal NPCCP Tier Proposals

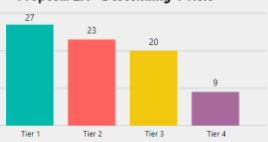
Phoenix Pinal Prescott Santa Cruz Tucson

4MP Tiers



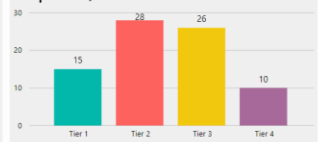
Tier 1: 0 - 5,000 service connections
Tier 2: 5,001 - 30,000 service connections
Tier 3: 30,001 + service connections

Proposal 2A - Descending 4 Tiers



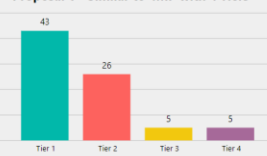
Tier 1: 0 - 2,000 service connections
Tier 2: 2,001 - 10,000 service connections
Tier 3: 10,001 - 40,000 service connections
Tier 4: 40,001 + service connections

Proposal 3A / AMWUA - Normal Distribution 4 Tiers



Tier 1: 0 - 1,000 service connections
Tier 2: 1,001 - 5,000 service connections
Tier 3: 5,001 - 30,000 service connections
Tier 4: 30,001 + service connections

Proposal 1 - Similar to 4MP with 4 Tiers



Tier 1: 0 - 5,000 service connections
Tier 2: 5,001 - 30,000 service connections
Tier 3: 30,001 - 85,000 service connections
Tier 4: 85,001 + service connections

Proposal 2B - Descending 5 Tiers

Proposal 3B - Normal Distribution 5 Tiers

PROPOSED 5MP TURF ALLOTMENT CALCULATOR FOR GOLF COURSES

DRAFT

Enter Course Information In White Boxes Below

Total Turfed Acres

Number of Holes

Water Surface Acres

Year Course Built

AMA

Proposed Allotment Information

Course Category

Turf Category 1 (AF)

Turf Category 2 (AF)

Turf Category 3 (AF)

Water Surface Area (AF)**

Total Proposed Allotment (AF)*



Last Updated: 7/30/2020

*Total Proposed Allotment does not account for any allotment additions or adjustments.

**If water surface acres were added after a certain year, depending on the AMA, the course may not be eligible for full water surface area allotment (see Proposal Description for more information).

[new.azwater.gov/5MP/
plans-concepts](http://new.azwater.gov/5MP/plans-concepts)

5MP Municipal Subgroup: Work Plan/Timeline

Topic (5MP Municipal Subgroup)	Meetings
Discussion of Non-Per Capita Conservation Program	February 2021
Discussion of GPCD Program <ul style="list-style-type: none">• Method for Establishing Targets• Flexibility Provisions• Types of Water Included	February 2021 March 2021
Discussion of Alternative Conservation Program	March 2021



5MP Turf Breakout Subgroup: Work Plan/Timeline

Topic (5MP Turf Subgroup)	Meetings
Golf Conservation Program	February 2021
Non-Golf Turf Facility Conservation Program	February 2021
Other Items, as needed	April (tentative)
Draft Regulatory Language Review	When available, 2 nd Half of 2021





Ag BMP Advisory Committee Work Plan/Timeline

Work Plan:

- **Monthly meetings:** new.azwater.gov/ama/bmp/meetings
- **Deadline for recommendations to meet 5MP timeline: May 3, 2021**

Topic	Meetings	Status
Discussion of each BMP & Category <ul style="list-style-type: none">• Technical Accuracy of BMPs• Improvements/Updates• Individual Points Values & Accumulation• BMP Categories & Points Requirements	January 2021 February 2021 March 2021	Continued discussion of Proposal from Chairman Riggins
5MP Structure <ul style="list-style-type: none">• Tier Proposal• Points target(s)	March 2021 April 2021	Will hold Tier concept for future plans
Analysis of BMP Program <ul style="list-style-type: none">• Consistency with statutory requirements• BMP Lineage Analysis		On hiatus: Pending agreement on 5MP structure, this topic may be moot
Wrap-up of BMP Committee Recommendations for 5MPs	May 3, 2021	5MP Subgroup will meet on March 24 & May 19, 2021

5MP Ag Subgroup: Work Plan/Timeline

Topic (5MP Ag Subgroup)	Meetings
Discussion of Integrated Farm Program <ul style="list-style-type: none">• Geographic Limitations• Cut to the Aquifer• Flex Credits	January 2021 March 2021 May 2021
Discussion of Reduction of Top 25% of Water Duties	May 2021
Discussion of BMP Program <ul style="list-style-type: none">• Recommendations from the Ag BMP Advisory Committee	May 2021

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new.azwater.gov/5MP

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5MPs Drafting Logistics

- * All 5 Fifth Management Plans will be drafted simultaneously
 - * Structure will largely match across AMAs
 - * Time for AMA Customization
 - * Subgroups will reconvene as needed to review draft regulatory language
- Goal: Publication of Initial Drafts in early 2022



Estimated 5MP Timeline

new.azwater.gov/5MP

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Questions?

Natalie Mast | nlmast@azwater.gov

managementplans@azwater.gov

Management Plans Work Group:
new.azwater.gov/5MP

Full Text of Management Plans:
new.azwater.gov/ama/management-plans



Governor's Water Council Annual Report



Carol Ward

Deputy Assistant Director, Planning & Permitting

“The annual report shall describe the activities and the recommendations of the Council.”



SUMMARY

This annual report describes the activities and the recommendations of the Council.

CONTACT

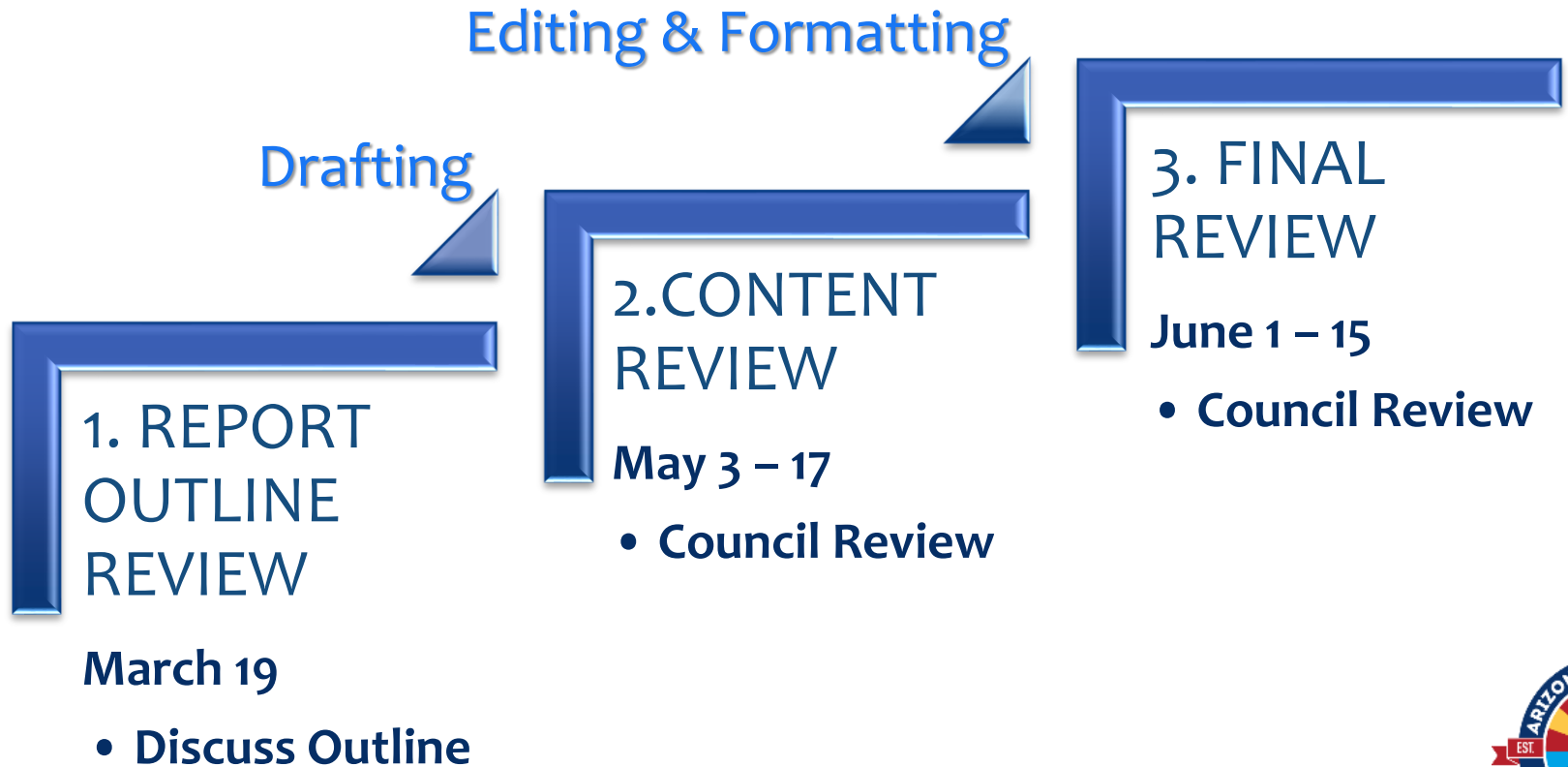
Phone: (602) 771-8511
Website: azwater.gov/gwaicc

ADDRESS TO
1110 W Washington Street Suite 310
Phoenix, AZ 85007

- I. Members of the Council
- II. Executive Summary
- III. Background
 - Council Role
 - Composition
 - Committees
- IV. Activities of the Council
- V. Activities of the Committees
- VI. Groundwater Conservation Grant



Annual Report Drafting Process



Questions & Comments on the Annual Report?



Committee Updates



Long-Term Water Augmentation Committee

Chairman Wade Noble

Next meeting of the LTWA Committee: TBD
Next meeting of the Storage Site Subcommittee: TBD



Long-Term Water Augmentation Committee Update

March 12, 2021 Meeting

- * Topics included:
 - * Water Importation Presentation by Chuck Cullom, CAP
 - * Storage Sites Subcommittee Update from ADWR

Future LTWA Committee Meetings

- TBD



Water Importation Presentation Summary

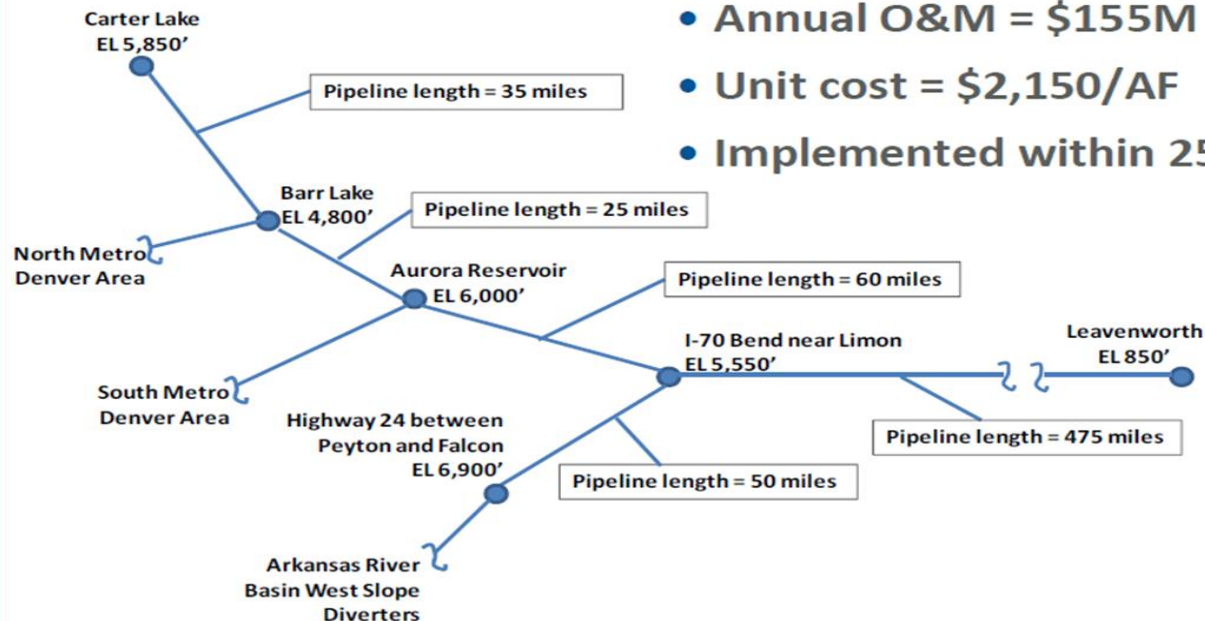
- * Brief history of Colorado River Basin augmentation
- * Augmentation concepts explored since 2008
 - * Basin States & binational process
- * Binational Desalination Study
 - * Identified potential desalination opportunities
- * Trans-basin Diversion Augmentation Concept
 - * Past studies include:
 - 2008 Basin States Augmentation Study
 - 2012 BOR Basin Study
 - 2014 Short List Study
 - * Short List Study Summary identified significant regulatory & permitting obstacles
 - * 2014 cost estimate of \$6 Billion dollars for concept evaluation of 200,000 af/yr

Summary of Short List Study Concept and Analysis:

June 26, 2014

PROJECT 10 – MISSOURI RIVER CONVEYANCE TO COLORADO FRONT RANGE

- Yield = 200,000 AFY increments
- Capital cost = \$5.6B
- Annual O&M = \$155M
- Unit cost = \$2,150/AF
- Implemented within 25 to 30 years



DRAFT – NOT FOR DISTRIBUTION



Storage Sites Subcommittee Update from ADWR

- * Formed to identify criteria for selection of potential underground storage sites for possible revision of the 2017 report Potential Water Storage Sites on ASLD State Trust Land
- * Subcommittee has met three times, most recently on Feb. 26, 2021
- * ADWR selected potential sites and evaluated the selected sites to identify if any common criteria surfaced.



Storage Sites Subcommittee Update from ADWR

- * The conclusion of this analysis showed that it is difficult to evaluate where it would be “best” to site projects on a statewide basis
- * Did not want to limit potential opportunities
- * Local stakeholders are best prepared to evaluate potential sites/opportunities
 - What would they need to consider to make an assessment?
 - What resources are available to assist?

Storage Sites Subcommittee Update from ADWR

The proposed approach includes a guide to underground water storage facility site selection

- Statewide evaluation criteria
- Initial investigations for interested parties to consider
 - Land use status
 - Technical feasibility
 - Regulatory & permitting considerations
 - Facility conceptual development
 - Facility design



Questions for the LTWA Committee or Storage Site Selection Subcommittee?

Chair: Wade Noble

Governor's Water Augmentation, Innovation & Conservation Council

March 19, 2021

Non-AMA Groundwater Committee

Co-Chairs Rep. Gail Griffin and Jamie Kelley

Next meeting: TBD



Desalination Committee

Chairman Henry Day

Next meeting: March 25, 10:00 a.m. - noon



Post-2025 AMAs Committee

Co-Chairs Warren Tenney and Tim Thomure

Next meeting: TBD



Post-2025 AMAs Committee Update

Governor's Water Augmentation, Innovation & Conservation Council

March 19, 2021



Post-2025 AMAs Committee Objective

GOAL

Identify water management challenges facing the AMAs and generate strategies and solutions for 2025 and beyond

2025

- Milestone set by the 1980 Groundwater Management Act
- Point in time to further direct water management in AMAs





Post- 2025

- Build on and improve Arizona's successes
- Tackle challenges facing the AMAs
- Responsibility to address today what will leave a better future for the next generations



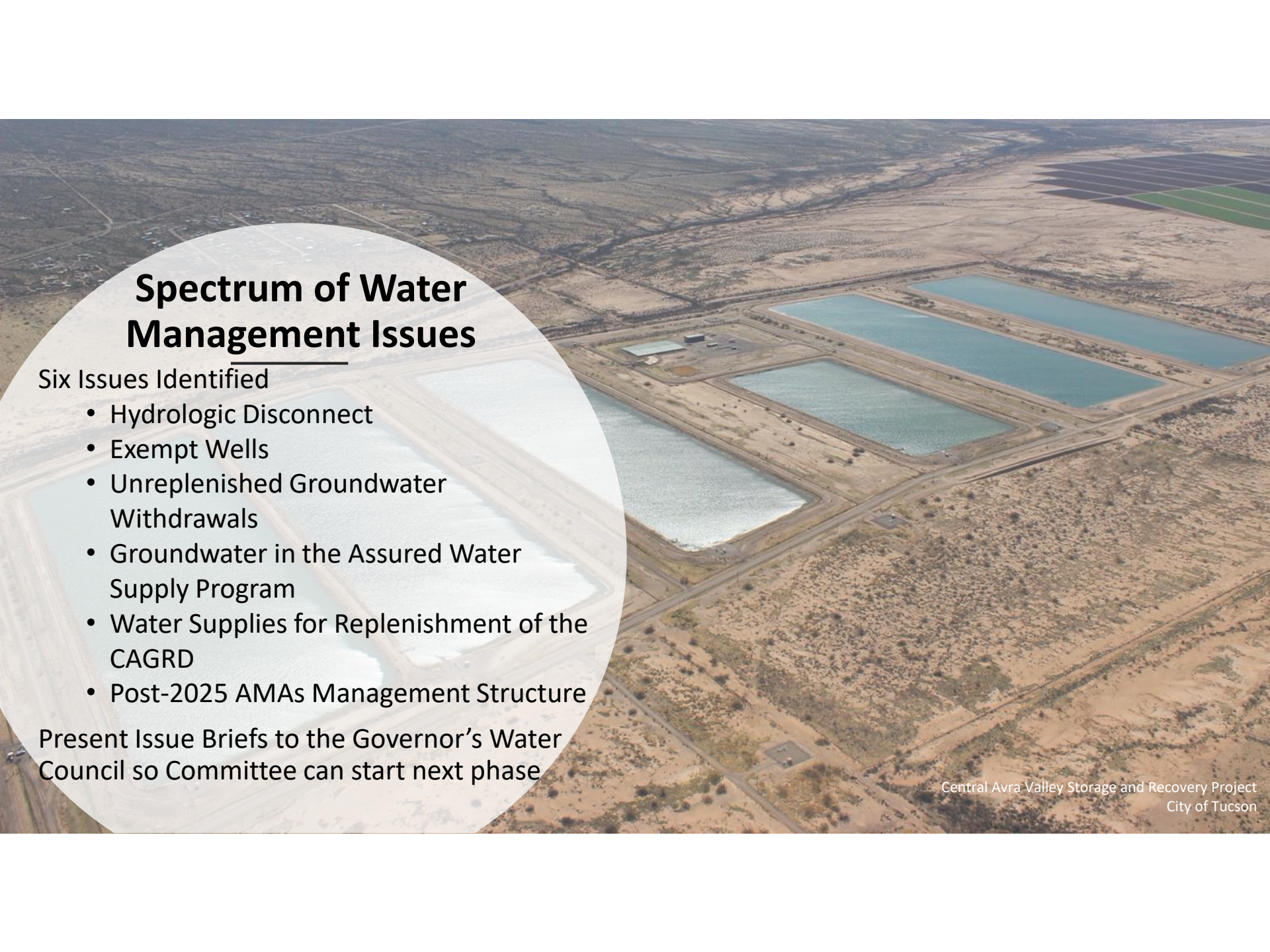
Committee's Approach

- Identify and Document Issues
- Present Findings to Governor's Water Council
- Develop Strategies & Solutions to address identified issues

An aerial photograph of a town, likely Flagstaff, Arizona, showing a mix of residential and commercial buildings, a large green field, and a network of roads. In the background, there are rolling green hills and blue mountains under a clear sky. A semi-transparent circular overlay is positioned on the left side of the image, containing the title and list.

Progress to Date

- Interaction through 9 meetings and written comments
- Grapple with how best to acknowledge difficult issues
- Document issues for a foundational understanding



Spectrum of Water Management Issues

Six Issues Identified

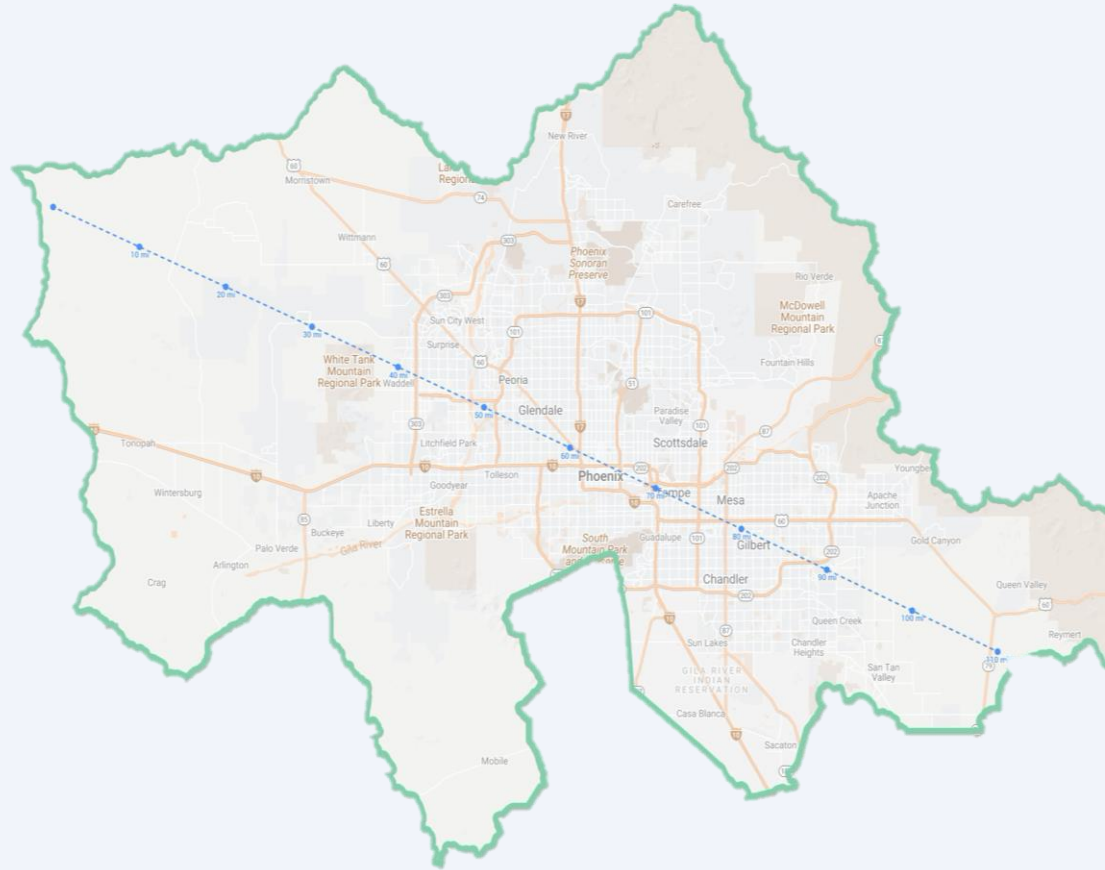
- Hydrologic Disconnect
- Exempt Wells
- Unreplenished Groundwater Withdrawals
- Groundwater in the Assured Water Supply Program
- Water Supplies for Replenishment of the CAGRD
- Post-2025 AMAs Management Structure

Present Issue Briefs to the Governor's Water Council so Committee can start next phase

Central Avra Valley Storage and Recovery Project
City of Tucson

Hydrologic Disconnect

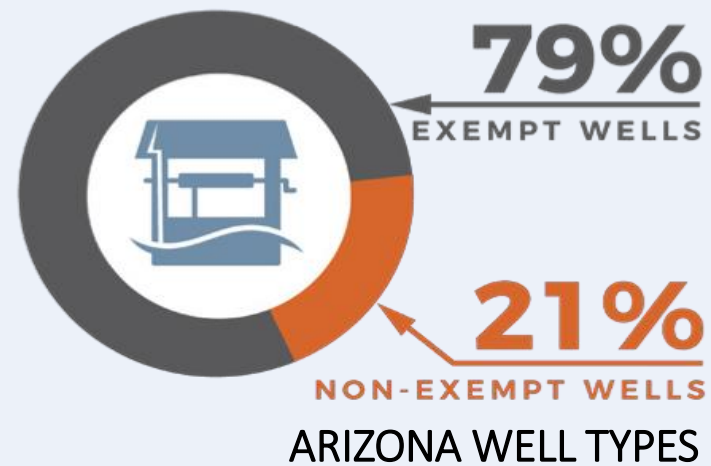
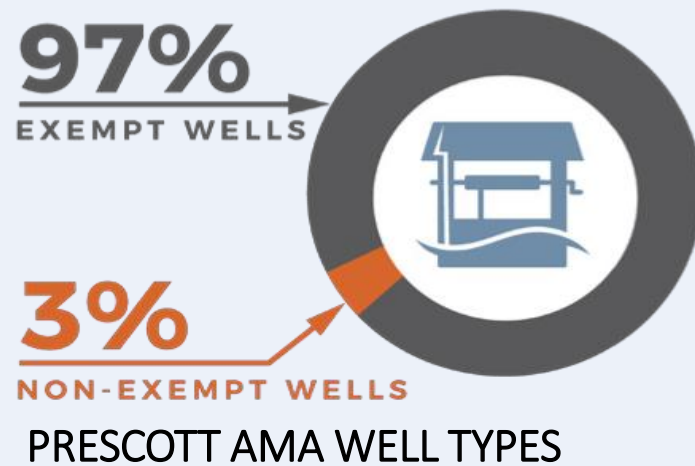
- Recharge & Recovery / Pumping & Replenishment can occur AMA-wide
- Pumping can occur that is not hydrologically connected to the area where water is stored/replenished
- This disconnect can lead to water management problems, including localized groundwater depletion



Phoenix AMA – 5,646 square miles / 100 miles wide / 7 sub-basins

Exempt Wells

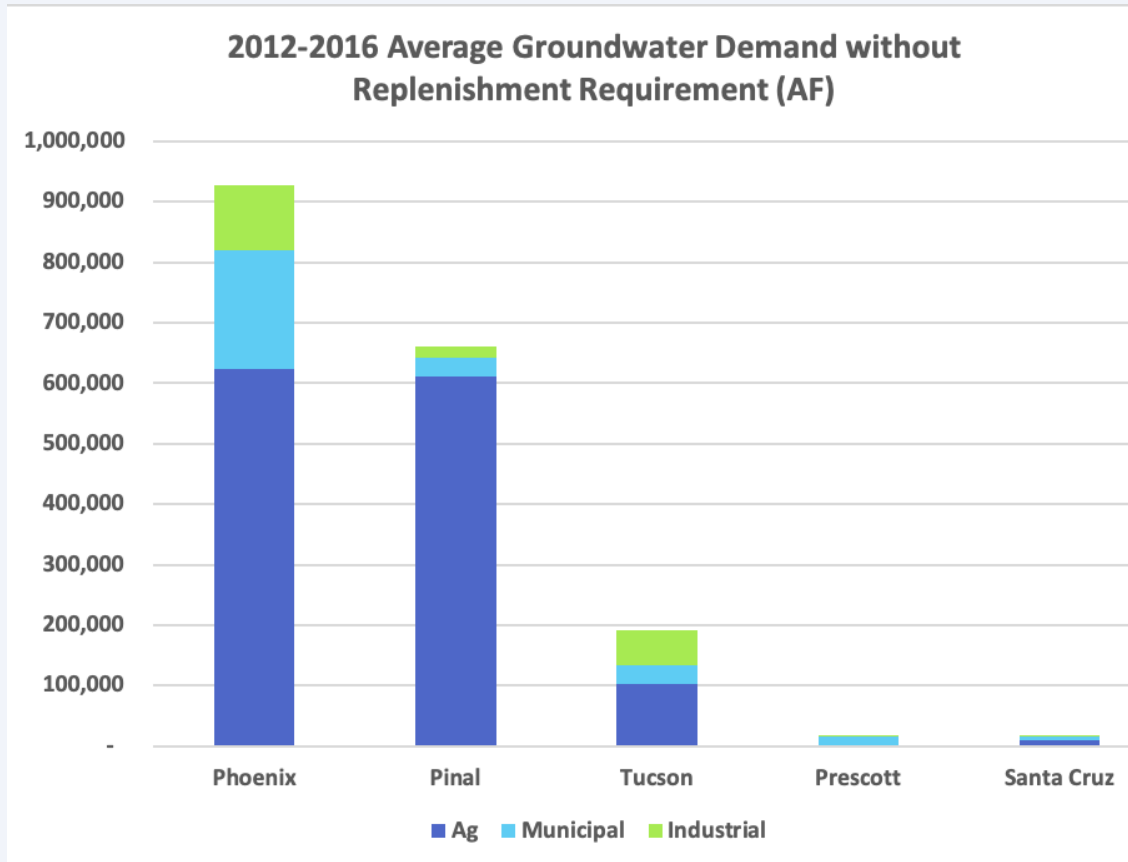
- Wells pumping 35 gpm or less for non-irrigation
- Unregulated but may impact other well types and affect aquifer viability
- Extent of the issue varies between AMAs



Graphic provided by ADWR

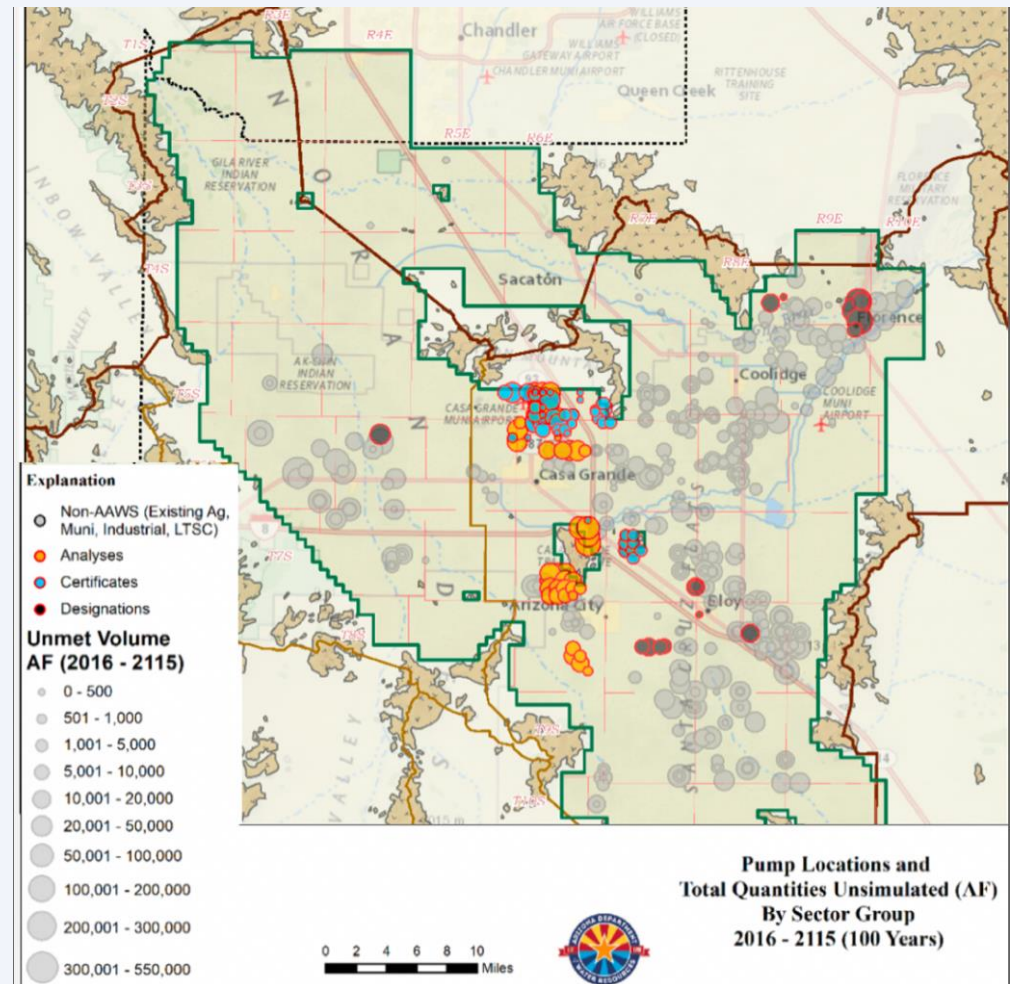
Unreplenished Groundwater Withdrawals

- Groundwater withdrawals allowed without requirement to replenish or replace
- Such pumping occurs in all sectors
- Contributes to water management challenges including overdraft



Groundwater in the Assured Water Supply Program

- AWS Program has benefited Arizona
- Groundwater withdrawals permitted
- Pumping impacts ability to demonstrate physical availability
- Challenges to obtain renewable supplies in groundwater dependent areas



CAGRD Replenishment & Water Supplies

- Focus on unique challenge facing CAGRD – well-administered responsibility of the CAWCD
- Long-term uncertainties of availability and costs of supplies for replenishment



AMA Management Structure

- 1980 - 2025
- AMAs –
 - management goal
 - management periods
 - management plan
- After 2025, limited ability for AMAs to adapt





Our Stewardship

- Water – Imperative for maintaining our life in the desert
- Impacts every facet of our economy and our lives
- Improving the management of our water resources benefits us today and far beyond 2025

A wide-angle photograph of a desert landscape. In the foreground, there are various desert plants, including tall saguaros and cholla, with yellow wildflowers scattered across the dry ground. In the middle ground, a calm blue lake is visible, surrounded by more desert vegetation. The background features a range of rugged, brown mountains under a clear blue sky with a few wispy clouds. A large, semi-transparent white circle is positioned on the left side of the image, containing the title and a list of bullet points.

Today and Looking Forward

- Increased collective understanding
- Seek support from Council to begin developing strategies
- Committee will delve into solutions phase

Closing Remarks



Upcoming Meetings

June 17, 2021, 10:00 a.m.

September 16, 2021, 10:00 a.m.

December 9, 2021, 10:00 a.m.



Contact Information

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cward@azwater.gov

ADWR/Council web page:
www.azwater.gov/gwaicc

